

Children's Newspaper

# The CHILDREN'S NEWSPAPER

AND CHILDREN'S PICTORIAL

*The Story of the World Today for the Men and Women of Tomorrow*

Number 100 Week Ending  
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EDITED BY ARTHUR MEE

Ready Every Friday 2d.

## CAN WE MEASURE THE UNIVERSE?

### TURNING A BATTLESHIP OVER WONDERFUL FEAT OF THE ENGINEERS

How a Capsized Dreadnought  
Was Set Right

#### BALANCING TWENTY THOUSAND TONS

Some time ago we gave in the C.N. a picture of the Italian battleship Leonardo da Vinci resting upside down in the dry dock at Taranto.

It was a strange position for a giant Dreadnought to lie in, but the vessel had capsized as the result of a treacherous explosion on board, and after turning turtle her turrets were embedded in the mud, and two hundred of her brave crew were imprisoned in the hull and drowned.

For a couple of years engineers were busy trying to float the vessel, and at last they succeeded. Then she was towed into dry dock, still keel upwards, and it was in this position that our picture showed her.

#### Warship Towed Upside Down

The turrets were removed, various repairs carried out, and the vessel made watertight, so that she could again float. Still upside down, she was towed from the dry dock into the harbour ready to be turned the right side up.

Several of our readers wrote to ask, at the time the picture was published, how such a gigantic ship could be turned over, and we are now able to tell them.

This great feat was accomplished the other day in the presence of the Italian Minister of Marine and thousands of interested spectators, many of whom came from long distances to see the unique spectacle.

The method of turning the giant over was ingenious, and yet very simple. Certain compartments in the battleship were filled with water, while others were filled with air, and in this way the centre of gravity of the vessel was so changed that the great mass, weighing nearly 20,000 tons, began slowly to revolve in the water and turn on its side.

#### Cheers for the Engineers

Then, by means of compressed air, the water was emptied out of some of the compartments and others had water pumped into them, so that the balance was again changed, and the process was repeated until the vessel had turned completely over, and was once again floating with its keel downwards.

The enthusiastic cheers of the crowd when the vessel was at last floating right side up were a welcome and well-merited recognition of the work of the engineers.

The whole operation was a very clever feat of the men in charge of it, and shows how the theoretical question in physics of the centre of gravity of a body enters into practical life.

### Young Holland Goes to School



Though we in Britain enjoy mild weather, a great part of the Continent of Europe is always frozen over at this season, and here we see a little Dutch girl going to school along a frozen canal, her sleigh being pushed along with the aid of pointed sticks

### C.N. GOES ROUND THE WORLD

ON January 1 Mr. F. B. Hirst of York made an offer in the C.N. to send one of his fine breed of Peruvian cavies to each of three readers of the paper who would combine to pay a year's subscription for a copy of the C.N. to be posted to some very lonely island where English is known.

We now know from Mr. Hirst the result of his offer. He writes to tell us that the three cavies have been sent to addresses he mentions in Taunton, Leicester, and Ipswich. Mr. Hirst says:

It has been a great pleasure to go through the 200 letters received, and though it was impossible to reply to all, I have answered all letters enclosing a stamped envelope.

Each of the three chosen readers has sent a third share of the subscription, and I now enclose it.

Please send the paper to Master Joe Glass, care of Mrs. Cyril Rogers,

Tristan da Cunha, South Atlantic. He will be delighted to receive the C.N. His mother has taught him to read and write, and readers of the C.N. must try to imagine what it is like to live on an island where there are no shops, no schools, no churches or chapels, no "pictures," and where there is no money.

The letters were full of enthusiasm for pets, and for nature generally—pathetic in some cases, but all showing a love for something to care for.

Above all was the great enthusiasm shown for the C.N. It has reached their hearts.

We are obliged to Mr. Hirst for his interest in the C.N. and its readers, all of whom will recognise the kindness that warms his own heart.

The C.N. is being forwarded to Master Joe Glass, and an article on Tristan da Cunha will appear in the C.N. shortly.

### SHAKESPEARE'S GARDEN

What Has Been Done  
There

#### THOUSANDS OF PLANTS FROM KING & PEOPLE

We have already mentioned in the C.N. the charming plan for laying out the garden of Shakespeare's house at Stratford-on-Avon with the flowers he knew and loved over three hundred years ago. We think our readers would like to know what has been done there.

Shakespeare went to London when he was 22, and after eleven years of hard work as playwright, actor, and poet he was able to buy himself a comfortable house in his native town. But he continued his work in London, and did not finally retire to his Stratford home till 1611, when he was 47. Five years later he died there, on his birthday.

The house he bought and lived in during the leisure of his later years is not standing, but its garden remains much as it was in his lifetime, and has now been laid out with all the flowers and shrubs which, as we know from his writings, he watched with delight.

#### Old-Fashioned Flowers

The trustees of the poet's birthplace have made this garden national property. It belongs for ever to the England that thrilled Shakespeare's heart with pride.

In order that the garden may certainly contain the flowers he would know the trustees have studied all the books on gardening that were then being read. These books tell us the flowers and plants that gardeners were cultivating in those days, and the trustees asked the public to send them, for planting in the old garden, any of these old-fashioned flowers they might have to spare.

Thousands of plants were sent in response to their appeal, and among the senders were the King and the Prince of Wales. Some of the flowers, notably the old-fashioned roses, were sent from the gardens of royal palaces which Shakespeare knew, and where he acted.

#### Where the Wild Thyme Blows

The pretty ending of these royal gifts was that the rose trees were planted in Shakespeare's garden by Lady Fairfax-Lucy, a descendant of the magistrate who punished Shakespeare for poaching deer in the wild days of his youth.

The garden has been planned afresh in the Elizabethan style, its walks bordered with box; and there is a bank whereon the wild thyme blows, Where oxlips and the nodding violet grows.

The directions by the writers on gardening in Shakespeare's day have been followed in laying out the beds, and next year all the flowers the poet knew will blossom there in due season, gladdening the growing and the declining year. We shall be able to walk about in Shakespeare's garden, which will look very much as Shakespeare saw it.



## CAN WE MEASURE THE UNIVERSE?

Professor Einstein's Startling Theory

### WHAT LIES BEYOND THE STARS?

Professor Einstein, whose theories about light and gravitation caused a great stir last year, has just startled the scientific world again by suggesting that the universe is finite, and that its size may be estimated.

He has come to this conclusion in the course of working out further results of his relativity theory. By applying his theory to the speeds at which the stars are travelling through space, and comparing the actual velocities as measured with those worked out by calculation, it appeared to him that gravitation at great distances was less than it should be according to the laws of Newton.

From this result, by a very abstruse system of reasoning, he maintains that it can be proved that the universe is not unlimited in size, and, further, that its actual size can be estimated approximately.

### Greatest of All Wonders

It has always been one of the wonders of astronomy that it dealt with that which is infinite. The writer of the Book of Job, when speaking of the marvels of the universe, asks, "Who hath laid the measures thereof, or who hath stretched the line upon it?"—an Eastern way of asking, "Who has been able to measure it as a man measures a field with a line?"

If the Einstein theory is right some of the wonder of the universe will have gone; but other scientists will no doubt have something to say about this new claim of the professor.

The questions dealt with are so difficult and mathematical that only highly trained experts are able to follow the reasoning, although even boys and girls may understand the results which the professor claims to have arrived at.

A universe that is infinite is a wonder almost beyond the imagination, but a universe that is finite is even more difficult to understand, for we may well ask, if the universe of stars and suns all around us has an actual ending, what lies beyond it.

## PRINCE WHO BECAME A REVOLUTIONARY

### Russian Scholar Dies in Poverty

Prince Kropotkin, a famous Russian revolutionary and scientist of world-wide fame, has just died at Moscow after a long illness.

The son of a nobleman, he was born at Moscow in 1842, and became one of the Tsar's pages at 15. Later he was appointed Governor General for Cossack Affairs, but his revolutionary views led to his arrest, and he was shut up in the notorious fortress of St. Peter and St. Paul, whence he escaped to England.

Here he lived for many years, writing scientific works and making a great reputation among the learned. When the Russian revolution broke out he returned to his country full of enthusiasm, but he lived to see that Communism was a failure, and he is said to have died largely as the result of privation.

He wanted to return to England, but was not allowed by the Bolsheviks to do so. Lenin, however, sent a special train with food and medical supplies.

But the old man's condition was too critical for these things to save him, and he died in misery and want.

### Pronunciations in this Paper

Cincinnati	Sin-sin-nah-tee
Giordano	Jor-dah-no
Melanchthon	Me-lank-thun
Riviera	Re-ve-air-rah
Schiaparelli	Skee-ah-pah-rel-lee
Vogel	Fo-gel
Wagner	Vahg-ner

## SAFETY IN THE AIR

New Device to Save the Lives of Flying Travellers

Although aerial transport companies are not yet compelled by law to provide parachutes for their passengers, it is certain that the time will come when no aircraft will be allowed to go aloft unless provided with adequate means of saving life in case of accident.

At present a jump from an aeroplane in flight is attended with no great risk provided the passenger is equipped with a parachute, although this method of alighting needs considerable nerve.

Mr. Everard Calthrop, the inventor of the most successful parachute in use today, has now produced an apparatus which will allow all the human freight of an aeroplane in distress to alight safely.

There will be one huge parachute, and, should circumstances demand it, the pilot will merely operate a lever, when all the passengers will find themselves in mid-air suspended from the parachute and floating safely to earth.

This life-saving device is being laid before the Air Ministry, and, in view of recent accidents, its tests will be watched with great interest.

## SWEETMEATS FOR THE WHALE

### Queer Scene in India

The Eastern mind, as it shows itself in India, is in some ways a curious mixture of what is good and what we regard as foolish. Care for animal life is good, though the reason for it is often faulty.

The reason is that the chief Indian religion supposes the possibility of the human spirit passing after death into an animal, and so in hurting an animal one may be causing pain to a dead friend.

This belief leads to some curious scenes. For instance, recently a large whale was stranded on the shore near Bombay, and the people around not only trooped down to the place to see the sight, quite strange to them, but many of them made offerings—such as sweetmeats and other things [quite unsuitable for a whale's enjoyment—to the dead whale.

The mixture in the Eastern mind of what is good and what is unwise makes the wise guidance of the people difficult.

### £700,000 A YEAR

### Problem of a Diplomatic Salary

Trade throughout Europe is being made difficult by differences in the value of the money of each country.

An illustration is seen in the difference between British and Polish money. The British Minister in Warsaw, the Polish capital, receives a salary of £4500 a year. This changed into Polish money is worth 14,000,000 marks, or, nominally, £700,000 of our money.

Why, then, it has been asked, should the Minister receive this amazing salary in Poland?

The answer is that in Poland the price of everything the Minister must buy is enormously large if reckoned in Polish marks. The big-figured money is only big in name. It will not buy goods at the old rates. Instead of paying with units of marks for a little thing the purchaser has to pay in thousands, so he does not get a multiplied value when he begins to purchase.

## OLIVER TWIST'S HOME

### Historic Building Becomes a Warehouse

The St. George's Workhouse in Southwark, London, where, according to the story of the tender-hearted Charles Dickens, little Oliver Twist asked for more of the thin gruel on which poor workhouse children were fed eighty years ago, has now become a linoleum and furniture warehouse, but it will live for ever in men's minds.

## CHIEF SCOUT'S COLUMN

Boys in War and Peace

### THE IMPORTANCE OF BEING PREPARED

By Sir Robert Baden-Powell

During the Great War an exciting struggle took place one dark night in the English Channel, where six German destroyers were attacked by two British boats of the same class.

In the darkness they had come to within close distance of each other before they opened fire, and the British boats, instead of pausing to carry on the action with gunfire, turned their heads toward the enemy, rushed straight at them, and rammed two of them down.

Naturally, in their own defence, the Germans turned on all the guns they possessed and caused many casualties on the British boats as they came on, but it did not save them.

As the Broke, the leader of the British boats, cut into its opponent the men on board climbed on to the bows of her attacker. Of the eighteen men who manned the fore-castle no fewer than twelve had been shot down, and the remaining six, with a midshipman at their head, had to stem the rush of the German boarders.

### Plucky Young Midshipman

This they did with the utmost gallantry, the boy himself, though wounded in the eye, showing great pluck and determination. He was tackled by a huge German, who was wrestling his pistol from him when a bluejacket appeared and saved the situation.

The fight was over in five minutes; the four remaining German vessels had fled into the darkness, and the British boats returned from their attack, battered but triumphant, bringing with them over a hundred German prisoners.

The young midshipman, Donald Gyles, was one of the heroes of the fight, and received the Distinguished Service Cross.

He was a Boy Scout.

The C.N. has already told the story of three children struggling for their lives in the Thames at Kingston. A boy of six had fallen in, his sister of eleven went in after him, and a third little chap also tumbled in while trying to help them.

### Brave Boy Scout

At the critical moment Wilfred Hill came on the scene. He sprang in just as he was, and made for the most desperate case—the boy who had first fallen in. He brought him safely to the bank. Then he dragged the girl ashore, and finally managed to land the other child. The onlookers took charge of the half-drowned children and brought them back to life, and while they were busy the rescuer quietly disappeared.

He was a Boy Scout.

That is how Scouts carry out their motto of Be Prepared. And that is how any boy can help his country and help other people. You would all do the same if you could.

But the thing is to be prepared beforehand, so that when the accident happens you can act while other people can only talk or shout for help.

### A Good Motto

It is no use jumping into a river unless you can swim. That is why Boy Scouts learn to swim as part of their training; that is why they learn First Aid and ambulance work.

Whether you are a Boy Scout or not, it is a good motto to remember—Be Prepared.

Then, too, we have all to die one day. I don't mean by that that you should be always thinking about death; you have probably a long and useful life in front of you. But if you are prepared—that is to say, if you are trying to make the most of your life and to do good to other people—then death is nothing to be alarmed about.

## BUSY SHIPYARDS

Building Up the World's Merchant Navies

### TRIUMPH OF THE TURBINE

Peace reigns once more on the seas, and great merchant navies are being built all over the world to carry its commerce far and wide across the great ocean highways.

Lloyd's Annual Summary of the Mercantile Shipbuilding of the World for 1920 contains some striking and romantic figures.

Owing to the cessation of the German submarine peril there is not, of course, the same feverish display of energy in the world's shipbuilding yards as there was during the last two or three years of the war, and so the total amount of tonnage constructed in 1920 is a good deal less than that constructed in 1919.

More than 7,000,000 tons were built in 1919, just under 6,000,000 tons in 1920, but though 1920 has shown this decrease on the 1919 figures, the amazing fact remains that the output for 1920 exceeds that of 1913, which was the pre-war record year, by more than 2½ million tons!

### Britain to the Fore

What is more, the mercantile tonnage launched for the three years 1918 to 1920 amounts to the huge total of 18½ millions—an enormous increase on any previous three years' output.

Another interesting and, to Britons, comforting fact, is that British shipyards in the United Kingdom are gradually regaining their old supremacy. We have always been the greatest shipbuilding nation in history, and though during the war various competitors, especially America, entered the field and we lost some ground, we are now making rapid headway.

In 1919 we built just over 22 per cent. of the world's merchant ships; last year we built 35 per cent. At this rate it will not be long before we get back to the 1913 figure of 58 per cent.

The turbine, it seems, has come to stay, for last year nearly 2,000,000 tons of vessels built were fitted with steam turbines. This amounts to no less than one-third of the total world's output of steel steam tonnage.

## DANGEROUS PLAYTHINGS

### No More Hydrogen Balloons at Dances

The London County Council has acted wisely in not allowing the use of balloons filled with inflammable gas at dances, where dresses and decorations are flimsy and might easily take fire.

Nothing should be used for amusement that endangers human life. The possible harm is so great that it should not be risked for a trifling pleasure.

The argument used in favour of the hydrogen-filled toy balloon was that to forbid it would be bad for trade. But how can trading in what is dangerous be defended? Is one man's profit to be thought of before another man's pain? No one ought to wish for a profit at the expense of safety.

Play with the balloons is not forbidden where there is no danger of setting things on fire; and in any case the old air-filled balloon is, of course, quite harmless.

## HERO OF THE OFFICE

### Bank Official Goes for a Missionary

If the C.N. is to be a record of heroic deeds it certainly must put on its list Mr. A. H. de Winton, of Lloyd's Bank in Lombard Street, who, retiring at the age of 55, has gone out as a missionary to Zanzibar for the remainder of his years.

In all probability those years will be few, for Zanzibar is not a healthy place even for the young or middle-aged. But the greater the danger the greater the heroism in such a choice of service.



## QUEER ROMANCE OF A COAL MINE

### Duke's Stately Monument Begins to Sink

#### THE NOBLEMAN AND THE JESTER

We are told that the mausoleum adjoining Hamilton Palace, in Lanarkshire, is to be removed.

The mausoleum is a tiny city of the dead, and within it rest the remains of the premier nobles of Scotland, the Dukes of Hamilton.

Once upon a time, before man lived, forest upon forest rose and perished upon the site, and became converted, in Time's wonder-working crucible, into coal. Busy miners are tunnelling to-day in that coal; they have cut away the foundations of this elaborate tomb, and floods, sweeping down the valley of the Clyde, have added to the dangers already manifest. And so the gorgeous sepulchre of the ducal Hamiltons must vanish, and Hamilton Palace, a creation of wealth and profusion rather than beauty, will in all likelihood vanish too.

There is a great irony in all this, for the mausoleum which must be dismantled in a hurry was built for all time. It was the creation of the tenth Duke of Hamilton, an eccentric nobleman, who spent £130,000 upon it in order that he, his nine predecessors in the title, his son, and his grandson, might all lie in it together to await the Day of Judgment.

#### Grand Scheme Goes Wrong

"What a grand sight it will be," he said, "when twelve Dukes of Hamilton rise together at the Resurrection!"

He died in 1858, and was buried in due time, and his son and grandson followed him to their last resting-place.

But nothing is as the old duke had planned. He planned that he himself should rest in regal splendour, a splendour not confined to the building, but extending even to his coffin.

He brought from Thebes what he believed to be the sarcophagus of an Egyptian queen, and he designed to lie where departed majesty had lain.

But when all was over a scholar learned in Egyptian lore came along and proved that the proud old duke had been buried, not in the coffin of a queen of Egypt, but in the coffin of her jester!

Today the palace in which he dwelt and the tomb that he built for all earthly time must go, and we remember the story only for its grim absurdity.

## NEW INVENTION FOR THE UNDERGROUND

### Gramophone Warnings at Oxford Circus

Travellers by the London Tube have endured much during the last few years.

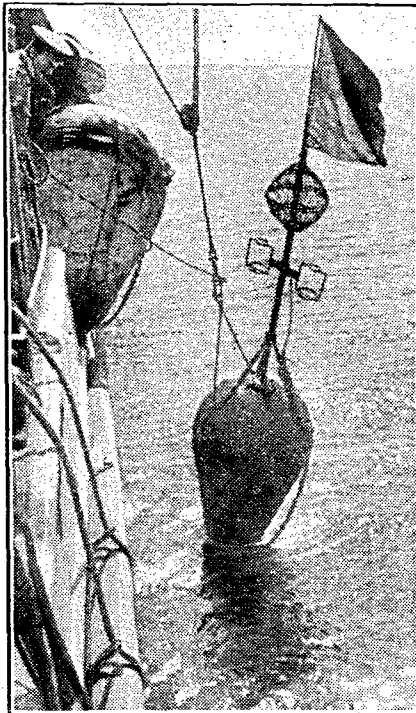
No sardines were ever wedged so tightly, no squad of raw recruits so hectorated and shouted at. No clown has surpassed some of the feats they have had to perform, trying to keep their balance, tired out at the end of their day's work, in a crowded car. All these tribulations has the philosophic Londoner endured in silence, but there is a limit to his endurance, as the authorities responsible for the latest addition to the Underground—the automatic stentophone—may soon realise.

The first of these contrivances has just been put into working operation at the foot of the escalator at Oxford Circus. It is a wooden structure about three feet square, worked by compressed air, containing a gramophone record that gives out every few seconds such warnings as "Pass along on the left there, please!" "Keep moving!" "If you must stand, stand on the right!" and so on.

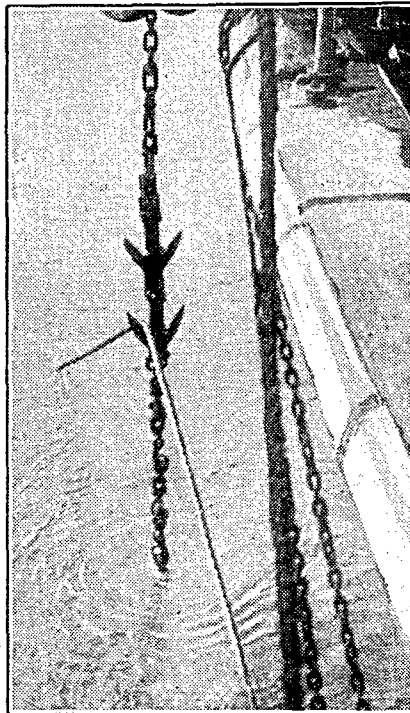
The Tube officials claim that this invention has come to stay, but, of course, the passengers may have something to say about it.

*Pictures on page 7*

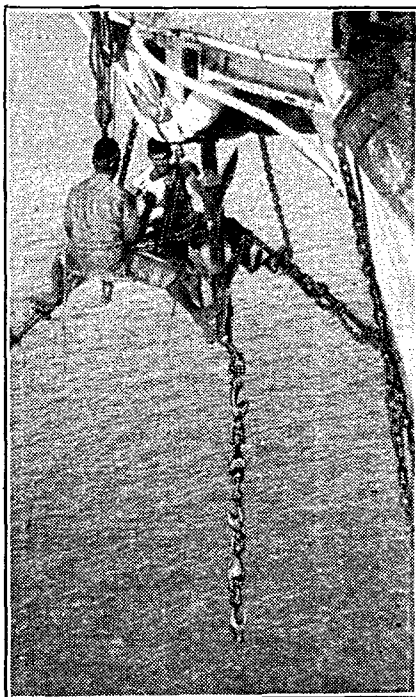
## MENDING A BROKEN CABLE



Anchoring a buoy to mark the probable position of a fracture in the cable



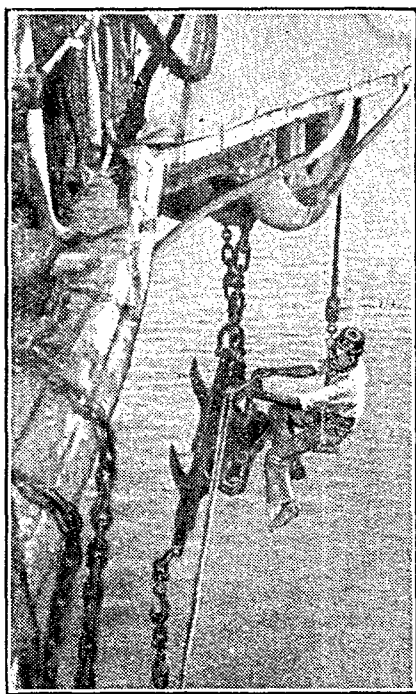
The cable being raised from the bottom of the sea by a grappling-hook



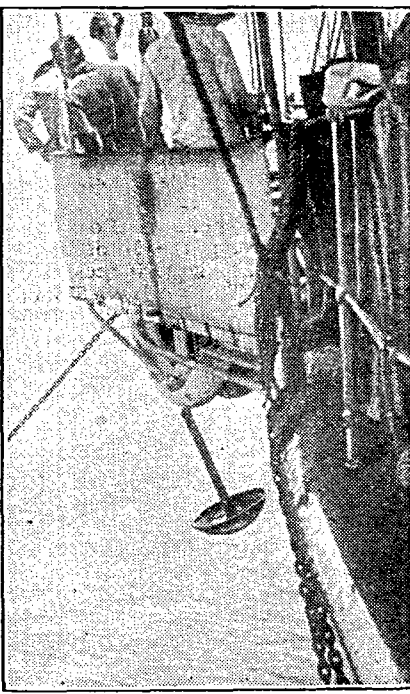
Cutting a cable through with a hacksaw before hauling the ends on board for testing



The ends of the fractured copper strand being joined up after the protective casing is removed



The submarine cable running over a pulley as the ship steams slowly along



The mushroom anchor which fixed the mark buoy being drawn up after the cable is repaired

It will be a long time before wireless displaces the submarine cable, and here we see the men at work on one of the cable ships that are constantly traversing the seas to repair fractures in cables caused by storms or sea creatures

## STATESMAN AND HIS BIRD FRIENDS

### LORD GREY'S LOVE OF NATURE

#### The Moorhen's Little Brothers and Sisters

### SQUIRRELS BESIEGE A CABINET MINISTER

When the late President Roosevelt came to England a few years ago his great desire was to see something of British bird life in the wilds.

He had his wish. Sir Edward Grey, who is now Lord Grey of Falloden, took him for a long week-end tramp through the New Forest, and the two men forgot all about statecraft in the presence of the beauties and mysteries of Nature.

Since then we have had a world war; Roosevelt is dead; Lord Grey has retired from public life. But still he calls us back to Nature and tells us of entrancing trivialities, and the other day a body of scholars sat spellbound as he chatted to them of things known only to himself and the birds with which he has made friends.

One point he made was the unerring knowledge of bird or beast between safety and danger in its surroundings. He mentioned a wild shoveller duck which, alighting in a garden where other water birds dwelt in safety, fearlessly permitted the owner to approach quite close, but which, on migrating to unprotected water a mile off, flew away at the approach of the same man when he was still 100 yards distant.

#### Nuts for the Squirrels

The finest squirrel story in the world centres about Lord Grey. When he used to go home to Falloden after long absence the wild squirrels in his woods, by some natural magic, always got to know. They used to troop in from the woods, invade the house, march in a body to his study, climb about him, gallop over his desk, make themselves masters of the situation, and, as plainly as squirrel language could put it, demand gifts from a bag of nuts which they had learned to know he kept for them.

Now he has just as charming a story of moorhens.

Every year two pairs of these birds, wild, timorous things, nested in the waters of Lord Grey's garden at Falloden and by degrees admitted him to friendship, so that they would come to be fed from his hand. The result is he has discovered that there are Wendys in the bird world—little mothers of babes not their own.

#### Feeding the Moorhen's Babies

Water-hens do not merely swim about with their broods and lead them to food: they place the food in the little ones' beaks. To one of the pairs of water-hens three young ones were born last May. They grew up, fed in the usual way. Then came a second brood, of two this time, and brood number one fed brood number two!

Lord Grey gave food to the parents, the parents gave it to the grown-up youngsters, and the grown-up youngsters passed it on, in turn, to the babies. Once, when a parent put food into the beak of one of the babies, a young bird took the morsel from the little one, then gravely fed it with the food itself.

President Roosevelt would rather have sat quietly by to witness that act than have shot a charging lion.

#### IN THE AUCTION ROOMS

The following prices have lately been paid in the auction rooms for objects of interest:

A suit of Bavarian armour . . .	£3570
Inkstand of George I period . . .	£403
First edition of Imitation of Christ . . .	£290
Two cottages at Uxbridge . . .	£210
The Welsh island of Madoc . . .	£200
An Elizabethan silver cup . . .	£182
An O.B.E. badge . . .	£4



## WHAT EDISON DID HIS PART IN WINNING THE WAR

### Mechanical Listener for Torpedoes Two Miles Away MAGNIFYING THE SENSES OF THE ALLIES

The most prolific inventor of modern times is Thomas Alva Edison, the American genius who has made life more comfortable for millions by an amazing number of ingenious devices.

His name is a household word, and during the war many wild statements were made concerning horrible inventions by which Edison would put an end to our enemies.

The fact is that the public does not know what Edison did, and there has just been published in America an account of his contribution to our victory.

At the time of the entry of the United States into the war the loss of allied shipping from submarine action was enormous, and Mr. Edison was asked to find methods of preventing it.

#### Listening for Submarines

Having gathered together at his laboratories a staff of engineers and mechanics, he gave his entire energies to experimenting with anti-submarine devices. He first sought a method of detecting submarines and torpedoes at a distance, and after much patient labour he evolved a listening apparatus which, carried from ten to twenty feet ahead of the bow of the ship, was not affected by the ship's vibrations or by the water rippling along its sides.

This apparatus proved remarkably successful, and by its aid it was possible while travelling at full speed to hear other boats moving a mile away; while the distinctive noise of a torpedo could be heard for more than 4000 yards.

#### Netting Torpedoes

On hearing the approaching torpedo the ship could manoeuvre to avoid it; but often the movements could not be carried out quickly enough, and Edison evolved a simple method of stopping and turning the ship almost immediately, so that only a small target was presented in place of the large broadside aimed at.

Another idea of his was to shoot from a mortar a series of steel nets, which would enter the water some distance from the ship and so interfere with the progress of the torpedo.

Firing at objects under water was always found to be most erratic, for often the shells would be deflected on entering the water. Edison succeeded in evolving a projectile which was not affected in this way, and so made firing at submarines much more accurate.

#### Looking Out for Hydrogen

Gazing on the sea in bright sunlight on the look-out for enemy submarines was a very difficult task; for the glare was blinding and a periscope was a small object to be seen at a great distance. Among the smaller useful inventions of this wizard was a little box-like arrangement which enabled observers to pick out, without undue eyestrain, objects in bright sunlight not discernible to the naked eye.

But Edison's inventions were not only for the detection of submarines, but also for their protection. Explosions were frequent on submarines owing to the accumulation of hydrogen, and an instrument he produced eliminated this danger, for it made possible the detection of .03 per cent. of hydrogen in the atmosphere of the submarine.

Among his later inventions and discoveries were an under-water searchlight, a method of producing nitrogen gas from the air, and a device for fighting coal-bunker fires. He also prevented submarine guns from going rusty, discovered a method of locating hidden guns, and invented a direction-finder for use against hostile aircraft.

## GOVERNMENT AND THE BACK GARDEN PROTECTING THE POTATO Information That May Save You £10 and the Country More MEMORY OF A GREAT FAMINE

We now grow in the United Kingdom nearly ten million tons of potatoes a year, and in order to protect this vast food supply a high official of the Ministry of Agriculture announces that it may be necessary to take drastic steps which will affect even the smallest grower.

Potatoes suffer from a fungus disease known as black scab, or wart disease, and this is such a dangerous enemy that if neglected it may ruin the whole crop of the country.

The wart disease is very infectious and rapidly spreads, and the Parliamentary Secretary of the Ministry of Agriculture has just announced that in the national interest it may be necessary to prohibit the planting of all potatoes except varieties known to be immune.

#### Watch Your Potatoes

Such a prohibition would be a very strong step to take, and yet all will agree that a disease involving millions of pounds and the existence of the people must be stamped out with energy.

It may not be generally known that anyone who finds this disease in his potatoes, though he may grow only a few in his back garden or allotment, must inform the Ministry of Agriculture instantly, and any neglect to do so involves a fine of ten pounds.

The consequences of the complete failure of the potato crop through disease were sadly seen in Ireland in 1845 and the following years, when, owing to excessive rains, blight attacked the tubers, and thousands of acres of potatoes were utterly destroyed.

Many remedies were tried, and in 1846 the crop promised well, but again the rains were exceptional and the old trouble came with increased virulence. In a single night the entire potato crop was blackened and destroyed.

#### Country Brought to Want

Ireland gave way to despair. No other food was available, and starving people wandered about seeking for roots and watercress to stave off their hunger. Workhouses were quickly filled, whole families perished, and 200,000 people are said to have starved to death. Disease and misery followed, and thousands emigrated every week. In a few years the population of Ireland decreased by nearly two millions.

Such scenes had not been witnessed in Britain for hundreds of years, and it was the moving spectacle of a country brought to want by the failure of the potato crop that led Sir Robert Peel to change his views and work for the repeal of the Corn Laws, so that cheap food might come from abroad.

#### After Results of Famine

Parliament voted ten million pounds for the relief of the sufferers, large sums were subscribed privately, and America and several European countries sent supplies of food; but for years there was dire want, with disease and misery.

A great deal of the disaffection of Ireland today can be traced back to the sufferings during the Potato Famine. The impression grew up that relief was not sent speedily enough, and many of the emigrants went to America cherishing animosity against the English, who were regarded as less energetic than they might have been in fighting the famine. Such ideas were probably mistaken, but they nevertheless took root, and are bearing fruit today.

Well may the Board of Agriculture, with the memory of the Potato Famine before it, take drastic steps to prevent a repetition of that dire event.

## ALPHABET WANTED Indian Children's Laborious Task

Writing on the want of education in India as it is, as mentioned in our article "An Empire of 700,000 Villages," a reader, who has been a missionary, argues that the reason for the backwardness of India in education is that it has no alphabet.

The Indian written characters represent, not letters, but syllables, and an Indian child has to learn 1000 of them, and at least 10,000 types are required to print them.

In the Indian army only 31 letters are used, and prove sufficient. The remedy for Indian want of education, our correspondent suggests, is for the Government to appoint a Commission in India, with Indian representatives, to decide upon an alphabet, and then let the use of the alphabet be optional in schools and public courts. Illiteracy will go from India as it has gone from Japan, and is going from China, with the use of a new script.

## MOURNED FOR HIS DOG Man Who Could Not Live Without His Friend

Many stories have reached us of dogs which have lost their interest in living when they lost a beloved master. A foreign correspondent sends us this account of the reverse case—a master who could not live after the death of his four-footed friend.

There lived near me a famous naturalist who had a very clever old dog, whom he loved very much. He talked to his dog as one talks to a man, and the dog looked at him so that one could believe he could understand all his master said.

The dog got a wound last summer which made it necessary that he should be shot. At first the old gentleman would not hear of such a thing, but the wound grew worse, and he was forced at last to agree.

From that day the old gentleman was not seen at his daily walk.

After a few weeks he grew ill and was obliged to remain in his bed; and after a week he died. Everybody who knew him said that his dog's death made an end of his life. His good heart could not forget his best friend—a dog!

## NYANJA AND BANTU

### Where You Can Learn Them

Anyone who wishes to learn languages in London can, of course, easily find many places where he will be taught such widely-spoken tongues as French, Italian, Spanish, German, Russian, and Dutch; but how many people are aware, we wonder, that the University of London has made arrangements for the teaching of these languages?

Amharic	Gujarati	Nyanja
Arabic	Hindustani	Pali
Armenian	Kaffir	Persian
Assamese	Kanarese	Sesuto
Bantu	Luchuan	Shan
Bengali	Malayalam	Swahili
Burmese	Marathi	Telugu
Chinese	Melanesian	Tibetan
Ethiopic	Nepali	Yao, Zulu

And we wonder, too, whether any of our readers could tell us the parts of the world where each of these languages is spoken naturally.

## THE X-RAY SHOE-FITTER Seeing the Foot Inside the Shoe

A bootmaker may make you a pair of shoes from the most careful measurements and may say that they fit you, but they may not be comfortable nevertheless.

A new American invention enables one to see, by means of the X-rays, just how the feet look inside a pair of shoes that are being tried on. If the feet are cramped the bones will be shown tightly pressed together.

The apparatus is so designed that the person fitted can see his feet under the rays at the same time as the shoemaker.

## THE WEEK IN HISTORY GREAT GERMAN WHO LOVED SHAKESPEARE Man Who Died for the Truth WORLD'S MOST FAMOUS ACTOR

Feb. 13. Wagner died at Venice . . . . . 1883  
14. Battle of St. Vincent . . . . . 1797  
15. Lessing, German poet, died at Brunswick 1781  
16. Melancthon, reformer, born at Bretten . 1497  
17. Giordano Bruno burned at Rome . . . . 1600  
18. Davis made President of Southern States 1861  
19. David Garrick born at Hereford . . . . 1717

#### Lessing

GOTTHOLD EPHRAIM LESSING, German critic of writers, dramatist, and poet, was a Saxon by birth. His three greatest interests were books, the theatre, and fairness in religion, and by his writings he did much to broaden German thought.

He was of a restless disposition, and wandered widely over his country, setting everyone an example of independence of thought. He it was, who taught Germany to admire Shakespeare as the greatest of the writers who have pictured mankind.

Two of his books are widely circulated throughout the world today. "Laocoon" is a work on poetry, painting, and sculpture—a study of what they really do. "Nathan the Wise," a blank verse poem, pictures a Saracen, a Knight Templar, and a Jew, men of three different religions, each of whom added something to the religious ideas of mankind. So the poet tried to suggest that God works more broadly than man's narrow bigotry, and that we ought to be tolerant.

#### Giordano Bruno

THE greatest of human rights is that of thinking the thoughts we must think, so as honestly to find out what is true. It is a right for which Giordano Bruno died, for in his day many men thought—and some still think—it wicked to find out honestly what is really true.

Bruno believed the world spins round and travels round the sun. We now all know it is true. He was burned at the stake for saying these and other things which he believed to be true. So he was a martyr to knowledge and honesty.

Bruno was an Italian who moved about the world, persecuted, from place to place. From Italy he went to Geneva, to Paris, to England, to Germany, Bohemia, Switzerland, and Venice, where he was seized, sent to Rome, imprisoned seven years, and then burned. A statue in his honour stands now on the place where he suffered.

Bruno was a great and honest man, but in his search for truth he spoke with greater harshness of those who were wrong than wisdom required; for they, too, thought they were right.

#### David Garrick

THE actor's art dies with him. The poet, sculptor, architect, engineer, can each be judged by the work he has left long after he is dead. The orator can only be judged in later generations by his words, and the actor cannot be judged at all except by those who hear him. All who heard David Garrick thought he was the greatest actor they had ever seen.

The son of an officer descended from French refugees, David went to school under Dr. Samuel Johnson, near Lichfield, and master and pupil set off to London together to seek their fortunes. Johnson's search was long and weary, but at the age of 24 Garrick was the most popular actor in the world.

He wrote plays, and managed and owned theatres as well as acting in them, made a fortune, was a genial and loyal friend, retained wide esteem, and was buried with honour in Westminster Abbey. But we can only judge him by the opinions of those who saw him, for the actor's fame is but as a breath.



She did not see, poor thing, that she was refraining from doing good, either to herself or to others, by hoarding this money and making it useless. In truth she was doing harm, both to herself and to others.



## CHILDREN'S NEWSPAPER

FEBRUARY 12 1921

## A Century

TODAY the C.N. publishes its hundredth number, and we welcome the occasion for a chat with our great host of friendly readers.

They, we are sure, will rejoice with us that the paper has been a great and increasing success, and now carries its message to every part of the world where the English language is spoken and understood.

What has that message been?

The C.N. has been built up on the belief that underneath the contentions and strivings of men there are truths, simple and great, and it is these truths that nourish the souls of men and women, making them good citizens, with right and kind thoughts toward their fellow men everywhere. The C.N. believes that these truths ought to be kept before the minds of boys and girls, that they may have their characters formed in an atmosphere of sympathy with all that is best and noblest in the world.

To the child the world is a place of wonders unsearchable, and it ought to be so to us right through our lives. It is a place of joy and hope, and so it should ever remain.

Influences that suggest what is mean and wrong abound, and they are infectious. But so, too, is the inspiring story of what is pure and just and noble, and that is the part of life which the C.N. exists to emphasise.

With infinite gratification we have proved, through the C.N., that this view of the world's want is taken by vast numbers of people. And, thank God, it is a view natural to the mind of childhood.

By the young everywhere, and by a great host of parents and teachers and thoughtful people of all ages, the spirit we have sought to infuse into our paper has been appreciated in the most delightful ways, as the letters we receive day by day testify.

Our work has been made easy by the splendid response it has brought from our readers, who have shown a cheering spirit of confidence and friendship. Even criticism has almost invariably been kind and considerate, and therefore welcome.

Hundreds of thousands have felt the C.N. to be their own organ in spirit and effort. Toward all we are bound to cherish grateful thoughts, and assure them in this hundredth number that the C.N., in its assured success, will continue to develop still farther an enterprise which we feel is being generally helpful to the boys and girls growing up round about us who will help to shape worthily the history of the next generation.



## THE EDITOR'S TABLE

Fleetway House, Farringdon Street, London

above the hidden waters of the ancient River Fleet, the cradle of the Journalism of the world



## The Turn of the Tide

ONE of the very big things in the world is that movement of the ocean called the turn of the tide.

Think for a moment of the mass of water in a great sea. Think of its extent. Think of its depth. Think of its weight. Then conjure up in your mind the vision of that huge thing moving—moving in one direction.

Picture it on a dark night, the sky starless, the earth in shadow, the winds roaring, that vast black Thing moving forward with a strength such as all the massed legions of the human race could never oppose.

And then it turns.

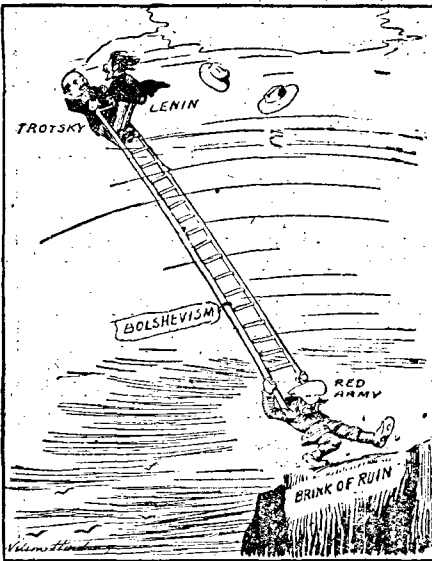
That mighty deep checks, trembles like a leaf, and turns about.

The other day we found in the writings of a great man the idea that when the least of us feels in his soul a new movement, a movement away from folly, weakness, and sin, it may be likened to the turn of the tide.

True; true and startling. But it is more startling to know that the turn of the tide in a human soul is ten thousand times a greater work than the turn of the tide in the ocean. It is a movement that carries us forward into another world.

## The Pens

WE have just been reading Sir Robert Peel's Letters, in one of which he complains that the only pens he can find are "about ten stumps, and three are split." It sounds as if he had been in an English post office.



The Great Balancing Act  
How Long Is It Likely To Last?

## The Next

THERE are still madmen who believe in war, and we hear of three scientific men discussing what will happen if these madmen have their way.

One declared that he could wipe out a city in half an hour from an aeroplane. Another undertook to blind, by a single stroke, an entire army over an area of several miles. A third would wipe out the whole population of a nation with germs of plague.

We can choose which we will—that, or the League of Nations.

## Trespassers Will Not Be Prosecuted

SOMEBODY has just taken down a notice that has stood in Hertfordshire two hundred years: *Anyone found tampering with these works will be transported.*

For years that mockery has stood at the side of a canal, and we smiled to think of its threat of transportation to whoever should tamper there. But it is not more of a mockery than all those notices which tell us that "Trespassers will be prosecuted." Trespassers will not be prosecuted, for trespass is no offence in this country. The only offence, of course, is when the trespasser does damage.

The proper thing to do if you have trespassed unknowingly and have possibly damaged a blade of grass is to offer the challenger threepence for the damage you may have done—*no more*. His pride will be hurt, but if he refuses to take your threepenny-bit he can bring no case against you.

## Tip-Cat

AN expert assures us that flowers are as foolish as people. Anyhow, this warm winter they are very early risers.

SIR FREDERICK BRIDGE says, "Modern music has gone beyond me." Generally you have to give the organ-man a penny before it does that.

"WHAT good is a penny in a sweet shop?" demands a leader writer. Half of twopence.

DOES the road-sweeper think his work beneath him?

WE believe in our clock; it never strikes.

SOMEBODY is talking of driving motors on onion juice. It is worth while running round to the grocer's to ask the price of onions first.

THE Prime Minister says the world is quietening down. We hope his hearing is as good as ever.

A BANKER was said the other day to have wasted thousands of pounds. We know a Government that has wasted millions.

"WE who sit here," declares an M.P., "have only two hands and a bench." Seem to have lost their heads.

## Life is Sweet, Brother

"Life is sweet, brother."

"Do you think so?"

"Think so! There's night and day, brother, both sweet things; sun, moon, and stars, brother, all sweet things; there's likewise the wind on the heath. Life is very sweet, brother; who would wish to die?"

GEORGE BORROW IN "LAVENGRO"

## Poems of Peter Puck

## The Patient Pet

Pet dogs at a Kennel Club Show lay down on silken cushions, and were sprayed with scent by their fond mistresses.

HE never dines with porcupines  
Or walks with lean giraffes,  
He shuns the smiles of crocodiles,  
And loathes the languid laughs  
Of dragons drowsing in the sun  
Or wakeful wombats on the run.

FOR him life booms. One thought consumes

His frame from crust to clogs;  
All day he'll con and dote upon  
Ladies with little dogs.

He never wants to wander from  
Miss Goldbags and her wheezy  
Pom.

THE coarser mind may pleasure find

In hog, and bear, and snake;  
He wholly sets his heart on pets  
That over-eat and ache.

And thus he is, as you may guess,  
A wealthy M.R.C.V.S.

Learn, then, this lesson: 'Tis the pet

That fills the purse of Mr. Vet.

## Tale of a Quicksand

By Our Country Girl

AT times the C.N. has to pillory badness, but it much prefers to look on the bright side of the picture, and to set off every example of stupidity, cruelty, and tyranny with stories of kindness, courage, and sacrifice. Here is a true story of a gentle-hearted soldier.

A party of little children, with a Sunday-school teacher, visited a small island which was accessible at low tide. The only people on the island were a few soldiers who kept a fort, but the party did not come across them at first. None of the party had been on the island before; they had come some distance to it in a train. Soon they were all scattered, exploring.

Three little girls were racing in a small bay when suddenly the leader screamed that she was sinking in a quicksand. Their shrieks brought the soldiers to the spot, and she was rescued with ropes and poles. The child was too young to realise all her danger, and soon recovered from her terror once she was on firm ground.

The teacher wanted to take her straight home, but one of the soldiers insisted on taking the child back to the fort and keeping her there while he and his mates washed and dried her clothes.

"For," he said, "if you go home in that mess, either you'll frighten your mother or you'll get a whipping."

The little girl who told me of her misadventure did not know what the old soldier's ribbons were, but I should not be surprised if there were a V.C. among them, for

The bravest are the tenderest,  
The loving are the daring.

When you begin to think of things rightly, the ideas of smallness and largeness pass away.

RUSKIN



PETER PUCK  
WANTS  
TO KNOW  
If a magic  
lantern slide is  
a winter sport



## BRITAIN'S COLONIES AND DOMINIONS

### MOTHERLAND AND HER GROWN-UP CHILDREN

#### Binding the Family Together

#### SOME PROBLEMS OF OUR EXPANDING EMPIRE

It is expected that the appointment of Mr. Winston Churchill as Minister at the head of the British Colonial Office will be followed by changes in the work of that office that every citizen should know of and be interested in, and therefore that every boy and girl, as future citizens, should understand.

The most important point is that soon some other name than Colonial Office will probably be given to the Government department that acts as a link between Great Britain and the great States beyond the seas which govern themselves, yet are proud to be parts of the world-wide British dominions.

The chief States concerned are the Canadian Dominion, the Australian Commonwealth, the Union of South Africa, and New Zealand.

The Dependency of British India is in a special position, and has a Government department and Minister of its own.

#### Colonies Govern Themselves

These countries are no longer colonies. They are countries that have complete self-government with which the Mother Country would not dream of interfering. It is not, therefore, suitable to call them colonies, or to have the business in which they and the home country are both concerned transacted in an office called the Colonial Office.

That office has a great deal of other important business connected with the government of real colonies, which are controlled from the Colonial Ministry in London, because the conditions of life among the mixed populations of scattered British possessions do not allow complete and unassisted self-government. So a Colonial Office is much needed.

#### Need for a New Name

But it is not needed for keeping in touch with the greater dominions over the seas. The department of the Imperial Government that deals with these larger self-contained States should have a different name, as its duties are different and the great dominions have a dignity as well as a freedom that should always be honoured.

The case is like that of a family that sends its boys and girls out into the world to make positions for themselves.

At first they depend on home help, guidance, and support. Then each begins to found a new home. The ties of affection are still strong. The family gatherings are delightful. The branches are proud of the parent stock and of each other. In times of stress they will stand faithfully together.

#### Big British Family

But it would be folly for the head of the family to try to rule and regulate the new homes that have been formed far away, for he cannot know the conditions surrounding them. To a large extent they must stand alone, but strengthened by the bond of common affection, and ready to help, if need be, the home from which they sprang.

This is the happy position of Great Britain and the loyal countries that are joined with her under one sovereign.

So it is generally hoped that Mr. Winston Churchill, in becoming Minister for the Colonies, will be able to concentrate his energies on the true colonies, and, perhaps under some other name than the Colonial Office, suggest a scheme of action for all the greater branches of the British family that will leave each branch with full independence and dignity, yet hold them all in loyal and proud kinship and unity.

## NEWS FROM EVERYWHERE

A man in Morpeth workhouse was born there and has lived there 95 years.

#### Faith in the League

The membership of the League of Nations Union is increasing at the rate of a thousand a week, and is now on its way to six figures.

#### Blown Out to Sea

A motorist paying a toll on the Marine Drive at Scarborough had a £1 note blown out of his hand. The note was lost in the sea, and the corporation has given the motorist another note for the one lost.

A business man travelled from London to Birmingham by aeroplane in three-quarters of an hour.

#### The Biter Bit

A rat nibbling through an electric cable stopped the tramcar service in Derby. The rat was killed.

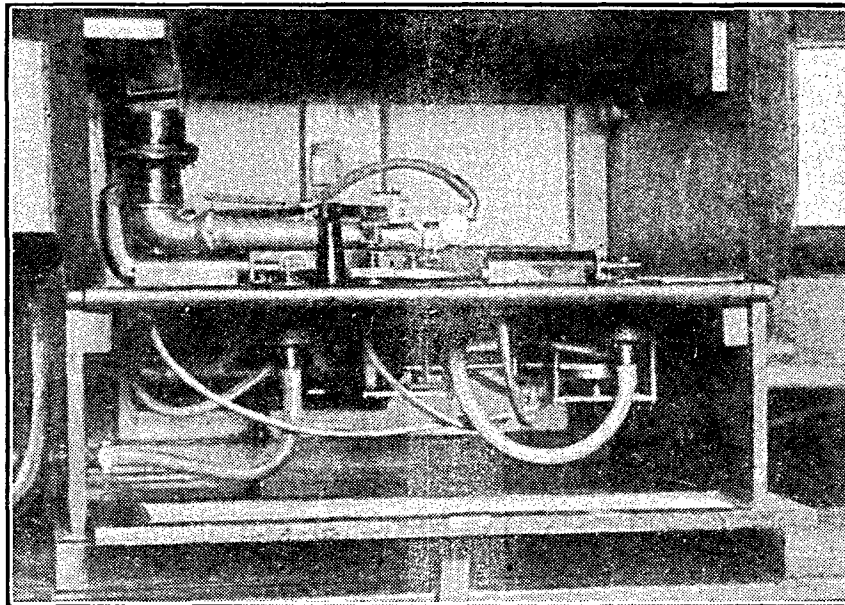
#### An Appropriate Text

The electric light failed at Trinity Church, Hounslow, the other night, and when it was restored the vicar's text, by a curious coincidence, was "Arise, shine; for thy light is come."

## THE VOICE THAT IS NEVER SILENT



The monster gramophone addressing the people on the escalator, or moving staircase



The machinery of the stentophone, which is worked by compressed air

At Oxford Circus Tube Station in London this monster gramophone has been set up and never stops telling the people to "Keep moving," "Pass to the left," and so on. It is called the stentophone, but passengers name it the hustlephone. See page 3

## A GAME OF CHESS WITH LIVING PIECES

It has been thought worth while to mention in the leading papers of the world that an Englishman returning to his home from New Zealand was presented before leaving with a set of chessmen made of cast-iron, so that the pieces, being heavy, should not tumble about in the course of games at sea.

There seems little novelty in this. Chess is one of the oldest games in the world, and it would be less difficult, perhaps, to say of what chess-pieces have not been made than of what they have.

Some time ago at Prague, where the chess-board was a marked space of nearly 2500 square yards, the 32 figures were living people. The kings and queens and knights were mounted and gorgeously attired; the castles were battlemented wagons bearing the banners and standards of the rival kings;

the bishops were mounted and attended by archers; the pawns appeared as halberdiers. A game of chess was played by the whole company to represent a battle, concluded in 16 moves, and the spectacle was remarkable and memorable in the annals of chess.

These annals stretch back to times before history. The origin of chess is claimed for Ancient Egypt, China, India, and Persia, but archaeology brings to light old chess-pieces from peoples who played before the rise of civilisation.

It is clear that the Saracens brought chess into Europe. Our men were great chess players in Allenby's crusade for the redemption of Jerusalem during the war, and it is thrilling to think that these men beguiled their leisure with the very game played by Crusaders in the centuries gone by.

## OIL ON TROUBLED WATERS

### ARE OUR FISH SUPPLIES IN DANGER?

#### Scientist's Grave Warning

#### MYSTERY OF THE CASPIAN SEA

An interesting discussion has been going on in the grown-up papers lately about the effect on our fisheries of oil fuel, which has been coming into increased favour year by year.

Sir A. E. Shipley of Cambridge, the chairman of the Marine Biological Association, thinks that the leakage of oil from the ships is injuring marine life, and that one of these days, if oil supersedes steam altogether, our fisheries will be seriously damaged. He says that about the year 1917 something happened which was very injurious to the plaice hatched that year, and he thinks that that "something" was oil.

It may be that he is right, for, of course, we know that, among other devices used to combat the submarine, the covering of large areas of the North Sea with thick, tarry mixtures to blind periscopes was very successful.

#### Sea Surrounded by Oil Wells

But the sea is a big place, and out of the 850,000 or 900,000 tons of fish landed in England every year about 95 per cent. is caught on routes not frequented by oil-driven vessels.

What is more, grown-up fish, with the exception of mackerel and pilchards, which come to the surface, haunt deep water, and are unlikely to be affected by a film of oil floating on the surface.

The Caspian Sea, we must remember, is ringed about with oil wells, and oil bubbles to its surface off Nargin Island, at the mouth of Baku harbour, in a perpetual stream. The whole of the Baku oilfields are situated within a mile or two of the sea. Most of the merchant ships of the Caspian, 200 or more, running up to 10,000 tons gross, burn oil, yet the Caspian is full of fish.

#### Looking After the Fishes

Great quantities are constantly being caught in the neighbourhood of Petrovsk, and Russia gets much of its sturgeon and the world its caviar out of the Caspian, which is full of oil and has no outlet save evaporation. If the oil danger is a fact then the Caspian Sea is something of a mystery. These facts tend to disprove the theory put forward.

At the same time it is a fine thing to know that our scientific men are on the alert against possible danger. One of them, Professor Meek, from his laboratory at Cullercoats, Northumberland, looks after the fishes of the North Sea, and many distinguished men are at present engaged on researches in other quarters. We may be sure that the Government will not neglect any conclusions at which they may arrive.

#### Swans Killed by Oil

Lord Rayleigh, son of the great scientist who was one of Cambridge's most distinguished men, has contributed a very interesting item to the discussion. He says that experiments made by his father in 1889 showed that a continuous film of oil on the surface of water need not be so much as a ten-millionth part of an inch in thickness. On the basis of these figures Lord Rayleigh calculates that the entire ocean could be covered by 500,000 tons of oil—an amount not beyond the carrying power of a fleet of very large ships.

Curiously enough, a complaint has just been made by Lord Montagu of Beaulieu that the swans on Southampton Water and the River Test are dying owing to the use of oil fuel in ships.

The oil that finds its way on to the water clogs their feathers, and this eventually leads to their death. In one place where there were formerly hundreds of swans there are now only six.



## NEW BRIDGE OVER THE THAMES

### IS IT IN THE BEST PLACE?

#### The Fears of Bridges in the Days of Old

### TERRIBLE THINGS THAT DID NOT HAPPEN

The Lord Mayor of London has announced that Southwark Bridge over the Thames, which for the last few years has been closed to traffic so that it might be greatly widened, will be reopened in a week or two, and that it is expected very soon to begin work on a new bridge opposite St. Paul's Cathedral, which will take several years to build and will cost four million pounds.

Everybody is agreed that increased facilities for crossing the Thames are required in London, but very many think that the new bridge would be much more useful at Charing Cross than at St. Paul's, which is quite near both to Southwark and Blackfriars Bridges.

The City of London, however, which finds the money out of an ancient estate, is anxious to keep the bridge within its own area, and so on this occasion, as on every occasion when a new bridge is proposed, there is some opposition.

#### Old London Bridge

For centuries there was only one bridge over the Thames at London, the old historic London Bridge, which was first built as a wooden structure in the fourth century. Being the gate into the city from the south, it was well fortified, and even after a stone bridge was erected in 1176 one of the arches was made into a drawbridge. The present London Bridge, begun in 1824, took seven years to build and cost a million and a half pounds. The stone used weighed over 120,000 tons.

The lack of facilities for crossing the Thames was greatly felt, and prevented London from growing as rapidly as it might have done; yet in 1736, when Parliament authorised the building of a second bridge at Westminster, the opposition was tremendous.

#### Petition to Parliament

A petition was presented to Parliament urging that the navigation of the river would be endangered; the tide would be retarded; shallows and sandbanks and eddies would be created; boats, barges, and larger vessels would be endangered; breaches would be made in the banks, and houses and lands flooded; and the result of all this would be a large increase in wages, a great rise in the prices of commodities, and danger and delay in the conveyance of goods, many valuable cargoes of which would probably be lost.

In fact, there seems to have been in the minds of the petitioners no limit to the dangers which the new bridge would entail. They went on to explain that a decrease of watermen would result, and this would mean there would be no men for the navy, as watermen supplied the warships with crews.

#### Thinking of the Boys and Girls

Then, too, they were very greatly concerned about the welfare of the poor little orphan children, as the vested interests always pretend to be, and declared that the charity institutions would be losers, because the City, with its traffic diverted to the West End, would lose many of its tolls and dues, and would be unable to go on paying the £8000 which it was paying for the support of orphans.

We are glad to know that though this and many other bridges were built, making communication between North and South London easier, none of the dire results prophesied came to pass.

Plenty of bridges are essential for London today. Across the Thames every day there pass by bridge and tunnel at least 100,000 vehicles, and more than 130,000 barrows and bicycles.

## SHALL THE OPEN DOOR BE CLOSED?

### A Call to the Children of England

One of the finest things in England, a thing that enables us to hold our heads up in spite of the shameful dog-holes in our slums, is a charter.

That charter runs: *An Open Door for Every Destitute Child.*

We may possess black and insanitary slums; we may in certain directions be slack in enforcing the laws that make for a happy childhood; we may leave foul air, depravity, darkness, cold, hunger, and cruelty to work their will on the childhood of our cities. This we may do, feeling ourselves powerless to stop it all, but at least we can say that a door stands ever open to receive every destitute child in our land.

For fifty years we have been able to make that boast, and during those fifty years an enormous host of over 90,000 destitute children has passed through that open door, to what?—to a home of love, devotion, and unfailing guidance, a guidance that has steered many to a new life in the Britains beyond the seas.

Who enabled us to make this boast?

#### Story of a Quiet Man

He was a man named Barnardo—an unknown, humble, and simple man who felt his heart stirred by pity for children living like hunted cats and beaten dogs in the slums of London. He set his hand to alter all that.

His pity drove him; his faith upheld him. It needed a long faith to carry him through the years ahead, 365 days in each year, on which his door had to be kept open for every destitute child in these hard and sometimes brutal islands.

His faith won the fight. By his faith we can hold up our heads. Slums?—yes; but 90,000 children saved from those slums in fifty years.

Nine children came recently from Plymouth in one day. The eldest was twelve, the youngest two. All of these nine children had suffered in one way or another; but consider the sufferings of the youngest.

He had no real father. The husband of his mother "beat him regularly with the buckle-end of a strap when less than 18 months old." When he was rescued this little son of England, heir of all

the ages, was "more like a watchful animal expecting harm than a baby."

This is not the worst of the cases. Some are too infamous for description.

Such is the destitution which pours in like a tide through the Ever-Open Door.

What becomes of it? Let one of its oldest workers speak: "I have yet to learn of any Barnardo boy who waited for conscription, who shamed the name of his benefactor, or disgraced his King and his country."

But: *How much longer shall we be able to hold up our heads because of this Ever-Open Door?*

Those inside, who minister to the destitute child, are now asking themselves:

#### Can We Carry On?

They have 7443 children to clothe, feed, and house. The cost of living hits them as hard as it hits the millionaire's wife with one child and the dock labourer's wife with seven children. It hits them so desperately hard that this grave statement is wrung from them:

The tide of high prices threatens to overwhelm us. Food, housekeeping, clothing, education—all are costing us more. *Our charter of the Open Door for every destitute child is in jeopardy.* In jeopardy!—the finest charter in England! Who will save it? Who will help to save the savers of the destitute child?

They cannot carry on if we do not help them. The day will come when a beaten and famished child will shrink through the darkness to the Open Door and find it open no longer, but a Closed Door with this legend written across it:

#### Bankrupt

Not Enough Love in England  
To Keep Me Open

Let that day never come! Let the children of our land save the home of the homeless children. So long as cruelty and slums exist that door must be open; not ajar, not on the chain, but wide open.

Remember Barnardo's Homes in the days of your rejoicing. Who saves a little child lays a stone for the Kingdom of Heaven.

## PETER PUCK ON TROUBLESOME PAT

"Why, what ever is the matter with you this morning?" asked Peter Puck, coming on the Mad Hatter a few minutes after breakfast.

"I'm grieving," sobbed the Mad Hatter, wringing his hands.

"Why?"

"For a friend of mine—a very old friend. He's in sore trouble, and the only thing I can do for him is to shed the helpless tears of true friendship."

"What is his name?" inquired Peter.

"John Bull," answered the Mad Hatter.

"John Bull!" exclaimed Peter, with a laugh. "What's the matter with John Bull? He's all right!"

"Oh, is he?" challenged the Mad Hatter, taking a letter from his pocket and wiping his eyes on the envelope. "You listen to this, then. I've just heard from him. This is what he writes: I'm in charge of two children who will not agree;

Together they're knocking the life out of me:

No bull was so teased by a wasp and a gnat As I by these beauties, Patricia and Pat.

They won't pull together, they will fall apart; The one is all head and the other all heart. Their idea of true bliss is a tit for a tat, And Patricia won't kiss and be friends, nor will Pat.

O, what shall I do with such children as these, The most turbulent pair in the whole seven seas? Till the lion lies down with the lamb it is flat I shall never get peace from Patricia and Pat.

"That is what he writes, poor old man," concluded the Mad Hatter, "and I feel for him as a drifter feels for a mine in the pea-soup of the North Sea."

"Well," said Peter Puck, "if I were in his place I know what I should do. I should say to them, 'Settle it between you,' and leave it at that."

Or, say, if the house of Patricia and Pat Won't hold them, why, fix them each up with a flat!"

"Ah, bless my wig and buttons," said the Hatter, "the two children can't live together and can't even agree to separate! Poor Mr. Bull! Well, well!"

## THE HAPPY THROG

### A Great Day in Every Month

#### TRAVELLING INTO THE REALMS OF GOLD

Have you ever noticed about the middle of each month—usually on the fifteenth—the extraordinary number of children making for the bookstalls and the bookshops, all bearing an eager, expectant look, as though they knew of a great treat in store for them?

They are never disappointed, for on that day the Mother of the C.N., My Magazine, is published, and for all those who read it there are trips into Realms of Gold.

There is no other magazine like it, as the following list of contents of the March issue, which will be on sale on Tuesday next, will show:

#### THEOPHRASTUS BOMBASTUS

The Wonder Man Who Startled Europe  
MASTER OF THE WORLD IN THE ICE AGE

The Colossus the First Men Saw

#### FLAGS OF 74 NATIONS

Banners of the World, New and Old, printed in full colours

#### THE LAST MEMORY OF A BAD LIFE

THE DARK HOUSE IN THE VILLAGE  
CAPTIVES OF THE MODERN WORLD

The Slaves We Have and the Slaves We Might Have

#### TALES OF THE WORD FAMILY

CECIL RHODES AND HIS COUNTRY  
The Empire Builder Who Believed in Universal Peace

#### THE PICTURE GALLERY

A Series of fine Paintings reproduced in photogravure

#### NATURE IS AN OPTIMIST

The One Sure Thing as the Ages Move  
A LITTLE GARDEN OF VERSES

#### AZOTOBACTER

The Little Helper in Life's Garden,  
Hidden in the Earth

#### A LITTLE TALE IN FRENCH

#### WHY THINGS ARE DONE

#### THE PLAYBOX

With pictures in colour and verses

Besides this fine collection of articles and glorious pictures, My Magazine for March contains many puzzles and stories; and many happy hours are in store for all who secure a copy and read it.

Join the happy throg on Tuesday next and ask for My Magazine.

## WIRELESS FOR THE LIFEBOAT

### New Hope for Those in Peril on the Sea

It is good to see the world's great inventors turning their gifts to the service of humanity, and exercising their ingenuity to save rather than to destroy—as most of them, alas, have been compelled to do during the years of war.

News comes that Marconi has perfected a small wireless set, with a radius of fifty miles, suitable for use on the lifeboats carried on steamships, so that, in case of shipwreck, the castaways will be able to get into communication with passing vessels, and escape the horrors of drifting about in inclement seas and perhaps perishing, while help, that they are unable to summon to their assistance, is near at hand.

It is intended to fit sets into the new motor lifeboats of the great White Star, Union Castle, and other lines. These lifeboats will be able, not only to send out wireless calls for help, but also to take in tow any other lifeboats fitted only with oars.

Science is indeed making giant strides these days in humanity's cause. The debt the world owes to Marconi is an unpayable one.



## THE WEEK IN NATURE

Jackdaws Go to Church  
BIRD CONCERT GROWS LOUDER

By Our Country Correspondent

**February 13.** The jackdaw is very much like the rook in appearance and habit, and is fond of flying about with that bird, which treats it with amused contempt, as though it were a poor relation. At this season, however, the jackdaw is thinking about nesting, and is resorting to church-towers and similar places to look for a suitable site.

**February 14.** The bird concert is getting louder and louder, as we recognise early in the morning, when there are few other sounds to interfere with the notes of the feathered songsters. Among the many bird voices now prevalent that of the yellow-hammer is quite conspicuous and distinctive. It has been likened to the words "A little bit of bread and no cheese."

**February 15.** Though the red dead nettle is generally regarded as a flower that comes out in April, it is often seen in February, and if we keep our eyes open we are almost certain to come upon the whorls of small red flowers by the roadside as we take a walk.

**February 16.** We hear so much about the partridge as game for the sportsman that we sometimes forget it is an interesting native bird abundant in cultivated districts. During the winter it has been seen in coveys, but now it is beginning to pair in readiness for the nesting season.

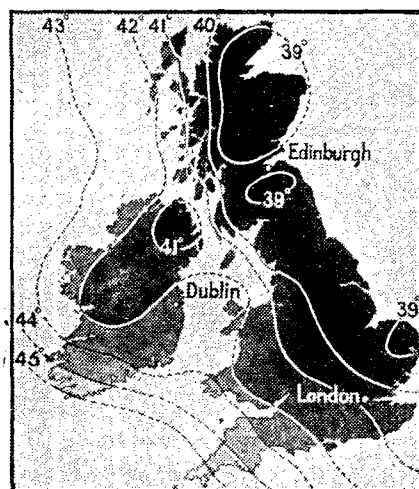
**February 17.** Perhaps our commonest wild flower is the dandelion, which seems to grow everywhere, and is already blossoming, although the botanists will tell you that it flowers from March to October.

**February 18.** Another bird that has begun to sing is the blackbird, and our gardens and orchards now resound with its mellow song, uttered as though it had plenty of time and did not mean to be hurried. Alarm the bird, and it will hurry off with a harsh cry.

**February 19.** The common bunting, a near relation of the yellow-hammer, is now more frequently seen than it was last month, when its song began. It is fond of the open fields, but if alarmed soon hides in the brambles of the hedgerow.

## C.N. WEATHER MAPS OF THE U.K.

The Temperatures of February



This map shows in Fahrenheit degrees the average temperatures of February in the U.K.

## NEXT WEEK IN THE GARDEN

Make fresh plantations of rhubarb by dividing the roots with a bud to each. Plant these three feet apart in rows three feet apart. Plant shallots in newly-trenched ground six inches apart, in shallow drills one foot apart.

Plant all sorts of fruit trees at the first opportunity, selecting trees of moderate growth with clean, healthy-grown stocks. Robust growing trees cannot be transplanted so successfully. Stake newly-planted trees.

## WORLD FAMINE OF PLATINUM

Russia Holds Up Supplies  
FROM £5 TO £25 AN OUNCE

The suggestion is made that when Russia begins to trade with other nations she should pay for the goods she buys with platinum. Platinum money was at one time coined in Russia.

Most of the platinum used in the world formerly came from the Ural Mountains, in Russia, but that supply has been cut off for the past few years and the world has had to depend upon the mines of Colombia, in South America.

It is true that British companies are operating the mines, but Colombia is very far behind the times in its transport facilities, and, as a consequence, the output of platinum there has been very restricted.

Yet the world is crying out for ever-increasing quantities of this important and valuable metal, which is used largely in the chemical and electrical industries. No suitable substitute for it has ever been found, and the shortage of the supply, together with the greatness of the demand, has sent the price up by leaps and bounds.

Twelve years ago platinum could be bought for about £5 an ounce, but by 1911 it had risen to £17. Last year the price was nearly £25 an ounce, and it is still increasing.

The Russian Government claims to have platinum reserves worth nearly four million pounds, and, as the gold has largely disappeared under Bolshevik rule, when the time comes to trade this platinum already available, with further stocks to be mined in the Ural Mountains, may prove a valuable asset, not only to Russia, but to the world at large.

## A GALLANT PRINCE

## King's Son Saves a British Sailor

At Stockholm the other day the Crown Prince of Sweden, walking near the harbour, rescued a British sailor who had fallen into the water, and then, after taking him to a café and treating him to hot coffee, ordered him dry clothes.

Such an act does more to draw out affection and loyalty than all the displays of pomp and royal show. Kipling tells us that:

The colonel's lady and Julie O'Grady  
Are sisters under their skins.

Evidently the Crown Prince of Sweden is not ashamed to be a brother under his skin to a simple British sailor.

## FLAGS OF THE WORLD

## New and Old

The first and most complete set of the flags of the nations since the war appears in the new number of the C.N. monthly, My Magazine.

There will be a great demand for this great flag number, but C.N. readers can make sure of their copies by ordering them now. The flags are finely drawn in their full colours, and there are seventy-four in all. Some of them have never appeared in any previous collection.

## DO ANIMALS REASON?

## A Cat's Ingenuity

A Lancashire reader sends an account of a cat's skill in getting food.

I had hung a piece of fat on a branch of a tree for the finches when a cat came along, and, seeing the fat, climbed the tree to the branch.

When it had crawled along the branch till the fat was directly underneath it, it still could not get it, for it was at the end of a piece of string. The cat then wound one of its paws round the string and lifted up the fat.

## C.N. QUESTION BOX

## Little Puzzles in Natural History

Answered by Our Natural Historian

All questions must be asked on postcards, and not more than one question on each card

## How Long Do Ants Live?

The late Lord Avebury had worker ants for several years, and a queen ant for over 15 years.

## Do Swans Sing Before They Die?

Swans utter certain notes, but they have no song. The belief that they sing when about to die is a pretty bit of poetic imagination.

## Do Red Ants Invade Houses?

They do. We have upwards of 30 kinds of ants in Great Britain, and many of them appear in places where they are not expected.

## Why Have Cats Different Coloured Pads?

It is impossible to account for this common fact. The colour scheme of a cat's pads does not appear to have any bearing upon puss's plan of life.

## Why Does one Cock Answer Another?

Generally the crowing of a cock is a challenge, and the second bird's reply is an answer to the challenge. The two birds would at once fight if they met.

## What Should a Baby Sparrow be Fed On?

Until its beak hardens, enabling it to feed itself, it should have bread and milk, with a little crushed seed mixed, insects, and little pieces of yolk of egg.

## Where are the Eyes of the Starfish?

The eyes of the common starfish are placed at the tips of the legs, or rays. They can be shut and opened at will. In that they are superior to the lidless eyes of fishes.

## Do Ants Kill Cockroaches?

Massed attacks of ants master more formidable quarry than cockroaches, but they do not, as a rule, attack cockroaches in this country. They would drain dead cockroaches of their juices.

## Do Sharks Sharpen Their Teeth?

Sharks' teeth grow one row behind another. Generally only those next the edge of the jaw are in use. When these are worn down the next row comes into play, moving forward in the process.

## What Bird Lays the Smallest Eggs?

In Great Britain the dainty golden-crested wren lays the smallest eggs; but the eggs of humming birds are tinier still, for some of these birds when adults are no bigger, without their feathers, than bumble bees.

## Of What Use are a Snail's Horns?

The horns, or tentacles, of snails, which protrude and collapse like telescopes, are very important organs. The eyes are in the horns, in some cases at the tips, in others at the base, while the senses of smell and touch are in them also.

## How Do Gulls Glide Through the Air?

As the string pulls the kite forward against a wind, so rapid beats of its wings enable a bird to glide for a while against a wind. That is a rough-and-ready answer, but the subject is now being investigated by scientists with a view to obtaining exact knowledge.

## What are the Stones in the Head of a Fish?

These are called otoliths, and are situated in the ears of fishes, and even found in the human ear. As fishes do not hear, but only feel pressure and vibrations, these stones must play a part in the rôle of the ear as a balancing, or depth-regulating, mechanism.

## Has a Complete Mammoth Been Found in Recent Times?

Yes; in Siberia several mammoths have been found, and men have even fed their dogs on the flesh, which had been preserved from dissolution by the frost. The full, fascinating story of the mammoth is told in a splendidly illustrated article in the new number of the C.N. monthly—My Magazine for March.

## LITTLE PLANET NEAR THE SUN

## HEMISPHERE ALWAYS IN THE NIGHT

Where the Sea Would Boil  
IS THERE LIFE ON MERCURY?

By Our Astronomical Correspondent

During the next two weeks we shall have one of our rare opportunities of seeing Mercury.

He will then be low down between the west and south-west for nearly two hours after sunset. The best time to look for him is from 5.45 till 6.30.

He will be seen to twinkle very much and to shine with a golden lustre far inferior to Venus, the glorious silvery orb high up and a little to the right of due south at 6 p.m.

Mercury is the most difficult of all the bright planets to find, particularly in these latitudes where mist and haze so often lie thick near the horizon. The difficulty arises through Mercury's nearness to the Sun. He is never more than 43,500,000 miles from him, and sometimes, once in every revolution, only 28,500,000 miles away.

## When Mercury Can Be Seen

He is at about this distance now, at perihelion, as astronomers say, and therefore he is more difficult to see than if he had been at his farthest, that is, at aphelion.

This nearness of Mercury to the Sun causes both bodies generally to be shining in the sky at the same time, with the result that Mercury cannot be seen without a powerful telescope on account of the Sun's brilliance.

For three or four short periods in a year, however, we may catch a glimpse of him during an hour or two after the Sun has dropped below the horizon or an hour or two before he rises. Most people prefer the evening for their search, so we choose that time.

There is great satisfaction at being able to gaze upon this unique little planet, a world only 3000 miles in diameter, and therefore not very much larger than our Moon, which is 2163 miles wide.

## World Baked by the Sun

There is now much doubt as to whether it possesses an atmosphere, although some years ago two painstaking astronomers, Schiaparelli and Vogel, considered they had found evidences of it.

One would like to think they are right, and that Mercury is another world full of the beauty and the joy of life, but, unfortunately, recent research shows that if air and water exist there it must be on a very limited area, for Mercury always turns the same side toward the Sun as the Moon does to the Earth. This results in a terrible state of things on Mercury, for nearly half of its surface is perpetually being baked by the intense heat of the Sun, which appears nearly seven times greater in Mercury's sky than in ours; indeed, it has been calculated that if there were any seas they would boil, and must soon vanish.

## Mountains Twelve Miles High

But there is the other half of Mercury, on the greater part of which the Sun never shines. Here it is perpetual night, and any seas on that hemisphere would be frozen solid unless Mercury possessed internal or chemical heat.

There would be no warm winds on an airless planet to reduce the intense cold of the mountainous solitudes, many of them calculated to be eleven or twelve miles high, on which our Earth is now shining with a lustre equal to that of Venus upon us at the present time.

There is yet another wonderful and weird region of Mercury, the "wide borderland," that has alternating days and nights, each equal in length to 44 of ours. What must be the condition of this mysterious region? And must it also be lifeless? G. F. M.



# OUT OF BOUNDS

An Exciting Story of the  
Secret of an Old Ruin

: : Told by  
T. C. Bridges

## CHAPTER 44

### The Smuggler's Passage

STRAIGHT on through the maze of passages Caffyn led the way, and Stan soon saw that the man knew them a deal better than he himself or Hank.

Caffyn's torch threw shifting shadows back on the walls of the tunnels through which they passed. No one spoke, and the silence was only broken by their footfalls echoing down the long stone corridors.

Caffyn never hesitated an instant. Each turning he took with a confidence which proved that he was familiar with this underworld, and Stan soon realised that he must have been through every yard of it time and again.

They came to the spot where he and Hank had turned off into the passage leading to the great well. Stan's heart was thumping, and his breath came quick and short.

But Caffyn did not turn down it. He kept straight on, and Stan breathed more easily. Taking a bend first left then right they arrived at the entrance to another crypt, much smaller than the big one and very ruinous.

Stan recognised it as a place that he and Hank had seen earlier in the afternoon, but which they had avoided because it looked as if the whole roof might come down at any minute. Part of it had indeed fallen already, and great piles of rubble blocked the floor.

But Caffyn did not hesitate. Picking his way in and out among the heaps of broken masonry he reached the far wall, and there stopped and faced his prisoners.

"Stand where you are," he said to Hank. "Delmar, you'd better watch them."

Delmar nodded and tightened his grip on his stick. Hank half turned, and Stan caught a wink from him, which meant, he knew, that the time was not yet come for any attempt at escape.

Caffyn laid down his torch. Stooping, he took hold of an old broken door which lay against the wall, and lifted it aside. Behind it the boys saw an opening. This was newly made, for the edges of the masonry were raw and freshly broken away.

Caffyn stood back. "Get in there!" he ordered; and Hank, with the slightest possible shrug of his shoulders, obeyed. As soon as he was inside Caffyn forced Stan to follow.

The tunnel was very narrow, and the roof so low that even the boys could not stand upright. The walls were raw rock and earth. As soon as they were inside, Caffyn, having whispered a few words to Delmar, followed them. But Delmar apparently turned back, for he did not come into the tunnel.

"Get on with you!" snapped Caffyn in his harshest voice.

Stan did his best to get on, but found it none too easy. The floor was rough and broken, and as his hands were tied behind his back he could not save himself if he stumbled.

By this time he was so furious that had his hands been free he would have turned and tackled Caffyn, even though he knew perfectly well that such a fight could have only one ending.

The narrow tunnel proved to be but a few yards long. Then it broke through into another, which was larger and evidently much older. Stan would have given anything to know where they were, or where they were going, but by this time he had lost all sense of direction.

The tunnel went on endlessly. There were no longer any turnings

or branches. The passage was perfectly straight and sloped gently downwards. Also, the air was quite fresh and sweet.

Stan began to count his steps. He had got somewhere over three hundred when the silence was broken by a faint sound. It was very slight, hardly more than a breeze would make blowing over grass, but as they went on it grew gradually louder and became a dull, low roar.

Hank heard it, too. He glanced back, and Stan saw that he at least knew what the noise was. A few seconds later, then Stan knew, too. It was water, the sound of waves breaking upon a beach.

"The cave!" he gasped out, then checked himself abruptly, as he heard Caffyn chuckle harshly behind him.

"So you understand at last?" jeered the man. "Ay, it's the cave in Priest's Cove that you two young idiots blundered into weeks ago. Bah! if you'd been as smart as you thought you were you'd have spotted the game then, but you never did, and now your luck has deserted you, and it's too late. I've won this game."

He chuckled again. "Well, I'm obliged to you for finding the plate for me," he continued. "To think that, after I'd been hunting for it night after night, you two kids should stumble on it the first time you made a search. Sheer luck, as I said before, but a bit too good to last."

Stan hardly heard. His thoughts were bitter indeed, and a blind rage boiled within him.

Caffyn was right. Surely, if he and Hank had had their wits about them they must have realised that this old smugglers' passage explained everything. True, it had been blocked when they had first examined it, but they ought to have known that Caffyn and Delmar had set themselves to clear it and to open the way from Priest's Cove to the ruins.

Yes, it was all plain enough now. Here was the explanation of Delmar's mysterious disappearances and his muddled state when he returned. Stan understood now what Caffyn had been talking about when he had said to Delmar that he could not do the job alone.

And now it was too late. He and Hank had found the plate only to let it fall into the hands of these thieves—plate which was worth thousands of pounds, enough, probably, to pay the whole of the debt owed to the elder Delmar and to save the school.

Those were the bitterest minutes that Stan had ever known in the whole course of his life.

## CHAPTER 45

### The Triumph of Caffyn

THE sound of the waves grew louder, and Stan smelt strong salt air. Caffyn's torch shone on a litter of untidy rubble covering the floor of the passage, and Stan saw that they had reached the place where the mass of fallen stuff had been roughly cut through. A little farther, and he could see daylight leaking in through the mouth of the cave.

He quickened his pace, but Caffyn stepped up sharply.

"No, you don't," he snapped. "It's in to the left you go."

As he spoke he caught hold of them and forced them into the passage which led into the spouting hole.

Again Stan felt a nasty chill creeping down his spine. It seemed quite likely that Caffyn intended to leave them at the mouth of the blow-hole.

Caffyn appeared to guess his thoughts.

"Oh, you needn't be scared!" he said scornfully. "If I wanted to get rid of you I could have done it before. Behave yourselves nicely, and you won't come to any harm. Of course, it may happen that they won't know where to look for you, but that's no business of mine."

He laughed again in his unpleasant way, then, without the slightest warning, tripped them both, so that they lay flat on the hard rock floor.

Once down they were, of course, quite helpless; and Caffyn, grinning as if he enjoyed it, proceeded to tie their ankles tightly with some stout cord which he took from his pocket.

He stood up again and flashed the light on them, looking them over carefully to make quite sure they were safe.

"And that's that," he remarked with a grin. "Well, boys, I'm sorry to leave you, but duty's duty; and young Delmar and I have got a job before us to get all that plate down to the beach. But it's worth a lot of trouble, for if we get anything less than ten thousand pounds for it I shall be badly surprised. Bye-bye. Be good."

Chuckling again, he turned and went quickly back up the passage. Hank and Stan were left lying on the bare, damp, rock floor, in almost complete darkness.

Caffyn's footsteps died away in the distance till there was not a sound to be heard.

Though his body was tied so tightly that he could hardly move, Stan's mind was racing after Caffyn and Delmar towards the spot where the valuables were to be found, and great was his mental torture as he thought of all it would mean to his family if the two rogues were to succeed.

To his own personal safety he gave not a thought.

Suddenly he realised his position and broke the unbearable silence.

"The beggar was right. We are a pretty pair of idiots," he groaned.

"Yes; I guess we can't exactly congratulate ourselves," agreed Hank drily. "But never say die, old son. What's he put round your wrists—string?"

"Cord."

"Well, roll right over and get your back towards me. My fingers are free, and I reckon there's just a chance I might be able to loosen the knots."

"You'll be jolly clever if you can. The beastly stuff is cutting right into my wrists," answered Stan; but as he spoke he rolled over, so that presently they lay close together, back to back. Then Stan felt Hank's fingers fumbling at the knots in the cord.

There was silence for some time. At last Hank spoke.

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"I'm real sorry, Stan, but I'll have to take a rest. I've got cramp in my wrists."

"Same here," replied Stan, and though the muscles of his arms were knotting into lumps and he was in agonies of pain, he lay quiet.

Outside they could hear the slow roar of the surf on the beach. Though the wind had gone down the sea still ran high. A bitter draught blew through the cave itself, and they shivered in the chill of it.

"I suppose they're getting the chest out," said Stan at last.

"Guess that'll take 'em some time," replied Hank. "She must be mighty heavy."

"Gold, Hank—gold and lovely stones. And—did I tell you?—it's all got our family arms on it. I should think there must be enough to pay Father's debt twice over."

"I reckon there will," replied Hank quietly.

"You reckon it will," returned Stan sharply. "You're crazy. We've lost it all."

"I'm not so mighty sure about that. I've a strong notion that Delmar is not going to get away with it."

"Who's to stop him?" snapped Stan. "We can't."

"Sit tight, old son. Even if they do get away with it, maybe we can follow them."

Hank's spirit was wonderful. For the moment Stan felt ashamed of his despair. But time passed, the chill bit deeper into his bones, and his spirits sank again.

At length a new sound came to his ears.

"Steps, Hank," he whispered.

Steps they were, slow and shuffling. A light gleamed in the tunnel, and presently two figures came by, bent almost double under heavy loads.

"There go the two thieves," muttered Stan.

"That's barely half the stuff," replied Hank in the same low voice.

"They'll have to go back for the rest."

Caffyn and Delmar dropped their loads and went straight back, and there was another long, cold, miserable wait until they returned with the rest.

This time they both came into the side cave.

Caffyn flashed his light upon his helpless prisoners.

"Feeling pretty good?" he asked. But the boys refused to be drawn or to answer.

This annoyed Delmar. He came up and stood over them.

"I told you I'd be square with you two," he said softly, "and I generally keep my word. This time I think you'll allow I'm a bit more than square."

"Square, you call it," replied Hank innocently. "Chaps like you they call crooks in the country I come from."

Delmar started angrily, but checked himself.

"Seeing that it's a country you're never likely to see again," he drawled, "it doesn't much matter what they say there or how they say it."

Caffyn broke in sharply.

"Stop that!" he said sharply. "Just remember we have to get the stuff down to the boat."

"Quite so," replied Delmar. "These little duties become a pleasure under the circumstances. Good-night, Prynn; good-night, Harker. But perhaps it should be good-bye."

He turned and followed Caffyn out of the cave, and Hank and Stan were left alone in the dark, lying helpless on the cold, bare rock.

They heard Caffyn and Delmar pick up their loads and carry them slowly down the steep slope to the beach; they heard them come back for their second loads.

These, too, they carried away. The sound of their steps died, and the silence was broken only by the boom and hiss of the waves on the beach below.

TO BE CONTINUED

Who Was He?

## The Gentle Governor

A YOUNG student of Oxford University, whose father was an admiral and a friend of the king's, was turned out of his college for associating with members of a religious society that had recently been formed.

When he arrived home his father was furious, and a little later packed him off to the Continent to see if a gay life in the French capital would make him forget his unwelcome ideas.

It was clear soon after his return to England that he still held the views for which he had been dismissed from the university, and he now had to suffer for his faith. He was imprisoned for several months in the Tower of London, and there wrote a book which became famous and is still read.

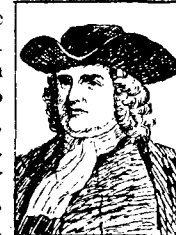
His father had lent the king money, and when the old admiral died the son agreed to cancel the debt if the king would grant him a tract of land in a distant colony. This idea pleased the king, the grant was made, and the young man sailed for his estate, taking with him a number of his co-religionists, who would there be able to live free from persecution.

Although the young man had received the grant of land from the king, when he reached the distant country he met the natives in friendly conference, and agreed to pay them for the territory he occupied. A friendship thus grew up between the natives and the settlers, which stood the test of time. There were no oaths to make the treaty binding, and it has been said that this was "the only treaty in history that was never sworn to and never broken." A monument now marks the spot where stood the tree beneath which the famous treaty was made, and a great and prosperous city has grown up all round.

Returning to England, this lover of peace and freedom saw the king and obtained from him the release of a number of his co-religionists who had been put in prison for their faith. But soon after a change of kings took place, and the man who had obtained the release of others was thrown into prison himself on a false charge of treason, and his governorship of the colony was taken away. Later, however, he was released, and restored to favour, and then he sailed to the colony for the second time.

He afterwards returned to England, and his closing days were embittered by disputes. His son proved undutiful.

Financial trouble came upon him, and he was thrown as a debtor into the Fleet Prison, where the C.N. office now stands, and, though after a few months he was released, he died in trouble. Here is his portrait. Who was he?







# An Ounce of Mirth is Worth a Pound of Sorrow



## D! MERRYMAN

"MY daughter saw in your show-rooms a car she very much liked," remarked Mr. Newrich.

"Yes, sir. And does the lady remember what it was?" asked the salesman, referring to the make of the car.

"Well, no," replied Mr. Newrich, "but she said it begins with T."

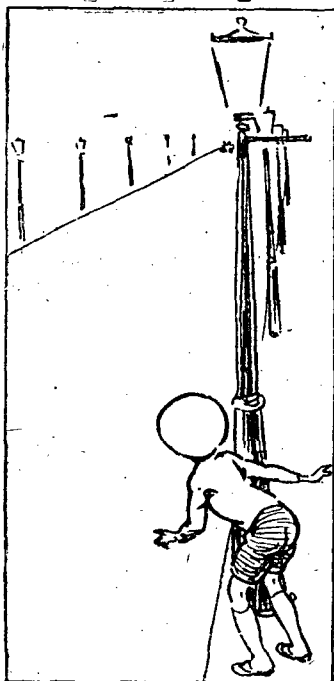
"It could not have been one of our cars, sir. Ours all begin with petrol," said the salesman.

### What Fish Is This?

I AM a fish both neat and clever,  
And in the crystal streams I play;

If you my head and shoulders sever  
You'll find me out as clear as day.

Answer next week



### Safety First

Do not cross the road until you are sure that all is clear

### Puzzle Arithmetic

A WEEK or two ago under this heading the question was asked "What is the smallest number of weights, and of what denomination must they be, with which can be weighed any number of pounds from one to 63 inclusive?"

Six weights were given in the answer, but these could be used on one side of the scale only. It has been pointed out that if the weights were used on both sides of the scales, any number of pounds between one and 63 could be weighed with only five weights—namely, 1, 3, 6, 20, and 40 pounds, or, as an alternative, a series of 1, 3, 9, 27, and 23 pounds.

### Just Remember This

WASTE not, want not, is the maxim I would teach.

And let your watchword be despatch, and practise what you preach.

Why is a popular actor like a clever architect?

Because he draws good houses.

### Topsy-Turvy

IF the butterfly courted the bee  
And the owl the porcupine,  
If churches were built in the sea  
And three times one were nine,

If the pony rode his master,  
If the buttercups ate the cows,  
If the cat had the dire disaster  
To be worried by the mouse,

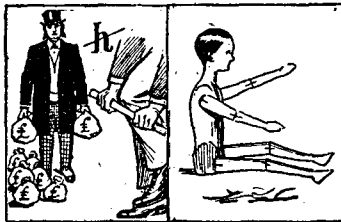
If mamma sold the baby  
To a gipsy for half-a-crown,  
If a gentleman were a lady—  
The world would be upside down.

### An Old Proverb in a New Dress

SUBMIT your whole environment to critical inspection  
Ere quitting terra-firma in a vertical direction.

This is another way of saying, Look before you leap.

### Is Your Name Here?



These pictures represent a boy's and a girl's name. Do you know what they are? Solutions next week

### The Broken Old Man of Nepal

THERE was an old man of Nepal,  
From his horse had a terrible fall;  
But though split in two,  
By some very strong glue  
They mended that man of Nepal  
EDWARD LEAR

### Rapid Construction

AN Englishman was showing an American friend a few of the sights of these islands. Whatever the American had been shown he had informed his guide could be bettered in the United States.

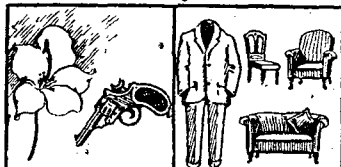
They were travelling in the North, and the Englishman thought it a good opportunity to show his friend the wonderful Forth Bridge, thinking that the American would at least be impressed by that.

As they approached the bridge the American nudged his companion, pointed in the direction of the huge structure, and said: "Say, what is that piece of trelliswork over that small ditch?"

Not to be outdone, the Englishman glanced carelessly at the bridge.

"Oh, that?" he remarked casually. "I'm sure I don't know. But it wasn't there yesterday!"

### Words That May Be Confused



Pistil Pistol Suit Suite



Valet Valley Whirl Whorl

Here are some more pairs of words which are often confused in conversation or reading, although they are spelt differently and have different meanings.

### The Puzzle of the Sheep

A MAN walking along a country road met a shepherd driving a flock of sheep.

"How many sheep have you?" asked the man. And the shepherd replied:

"If I had as many more, and half as many more, and a quarter as many more, I should have one short of a hundred."

How many sheep were there?

Solution next week

### ANSWERS TO LAST WEEK'S PUZZLES

Figure Problem 50½  
49½  
100

### Hidden Battles

Waterloo, Sadowa, Lucknow

### What Are They Doing?

The girl was writing and the boy was flying a kite.

## Jacko Borrows a Saucepan

FATHER JACKO was annoyed with his youngest son, and when Saturday night came, and Jacko asked for his usual sixpence, his father said:

"You won't get any money out of me, my lad. If you got what you deserved, you'd have your pocket-money stopped for a month."

Unfortunately for Jacko, the circus must choose that particular week to come to the village. Of course he wanted to go, but how could he get in without money?

His mother was sorry for him, but she wouldn't give him anything, however hard he begged.

So Jacko hung about outside the tents and heard all the fun going on inside till his face grew as long as a fiddle.

While he stood listening a woman came along with a tray of sweets and held it out. Jacko shook his head.

"Can't even buy a pennyworth of toffee," he muttered. "The Mater used to make top-hole toffee," he said to himself; but when he asked her at dinner why she never made any now, she said she hadn't the time.

"It's only treacle and butter, isn't it?" he asked.

"Yes," replied his mother.

Jacko didn't say any more; he had an idea, and he was thinking hard. If only he could get his mother out of the



"What have you done?" cried his mother

way he could make some toffee himself, and sell it outside the circus, and buy a ticket with the money.

"That's a brainy idea!" declared Jacko.

And when his mother went upstairs after dinner and told him not to make a noise because she was going to lie down, he could have danced a jig on the kitchen table.

Directly she was safely out of the way Master Jacko darted into the larder and brought out a jar of golden syrup and a great lump of butter. Then he hunted round till he found a nice, shining pan, planked the butter and syrup in it, and set the lot on the stove.

Then he found a paper, and sat down in his father's arm-chair to read till the toffee was done.

Before long a strange smell crept over the house. It didn't worry Jacko, but it woke his mother.

"Jacko! Jacko!" she screamed from the stairs. "I can smell burning. There must be something on the kitchen stove. What ever is it?"

"Only the toffee—" began Jacko. "Great Scott!" he exclaimed. "The beastly stuff's caught fire!"

"Oh, what have you done?" cried his mother, running into the room. "What a smother! And you've burnt a hole in my brand new pan! You wait till your father comes home!"

But Jacko didn't. He went away and lost himself till it was time to go to bed.

## Ici on Parle Français

### Sayings of Jesus: There Abide

9 Ne prenez ni or, ni argent, ni monnaie, dans vos ceintures;

10 Ni sac pour le voyage, ni deux tuniques, ni souliers, ni bâton; car l'ouvrier mérite sa nourriture.

11 Dans quelque ville ou village que vous entriez, informez-vous s'il s'y trouve quelque homme digne de vous recevoir, et demeurez chez lui jusqu'à ce que vous partiez.

12 En entrant dans la maison, saluez-la.

13 Et, si la maison en est digne, que votre paix vienne sur elle; mais si elle n'en est pas digne, que votre paix retourne à vous. Saint Matthew 10

## Notes and Queries

### What does M.I.C.E. mean?

These letters after a man's name mean that he is a Member of the Institution of Civil Engineers.

**Why is the Clock at Westminster called Big Ben?** It is so called from the great bell there, which is named after Sir Benjamin Hall, Chief Commissioner of Works when the bell was cast.

### What does Palaeozoic mean?

This is made up from two Greek words meaning ancient and life, and is used to describe the oldest layers of rocks in which remains of life are found. It is also used for the geological era in which the palaeozoic fossils lived.

## ABC Stories

### Excellent

**X** STANDS for excellent—the word Miss Gordon would write at the bottom of a very carefully-written copy.

Miss Gordon was the governess, and Jimmy and Joan thought her very hard to please.

Perhaps it was because they were such naughty children.

One day a conjurer came to the town, and of course the children were wild to see him.

"Won't you take us, Daddie?" they asked.

"If you are very good all day," replied their father, "and get Excellent on your copies."

Joan pouted. It was a long time since either of them had even had a V.G. on them, which means, of course, Very Good.

They started well enough, but, before the morning was over, Miss Gordon dropped her eyeglasses; and Joan, in her efforts to pick them up, trod on them and broke them.

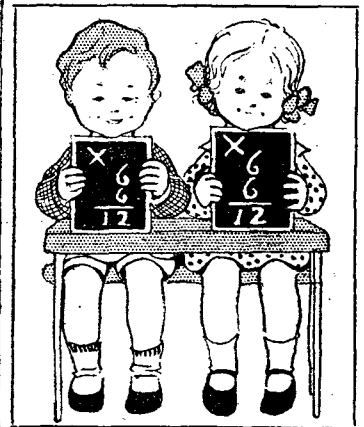
Miss Gordon was angry and spoke sharply; and after that things got as bad as ever. The children were lazy and inattentive, and when Miss Gordon set them sums they rubbed the figures out, and played noughts and crosses on their slates instead.

As Jimmy was finishing his copy at the end of the day, Joan pushed his arm and sent a stream of ink from the top of the page to the bottom. Jimmy grinned, poked his finger in it, and dabbed it on Joan's copy. Then Joan grinned.

It was just at that moment that they heard their father's key in the hall-door.

Suddenly they remembered the circus, and they looked at their books.

Very quietly Miss Gordon came and leaned over their



Jimmy and Joan

shoulders. She took up her pen and wrote, first on Joan's copy and then on Jimmy's, one word—Excellent.

For a moment the children were too astonished to speak. Then Jimmy sprang up and gave a great shout.

"You're a darling!" he declared, flinging his arms round Miss Gordon's neck.

"You're an angel!" shrieked Joan. "We'll never be bad—really bad—again."



The Children's Newspaper grows out of My Magazine, the monthly the whole world loves. My Magazine grew out of the Children's Encyclopedia, the greatest book for children in the world. The Magazine appears on the 15th of each month, and the Editor's address is: Arthur Mee, Fleetway House, Farringdon St., London, E.C. 4.

# CHILDREN'S NEWSPAPER

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## STATESMAN ARTIST • HOME-MADE LOCOMOTIVE • NATION BUYS A PICTURE



**First British Woman to Hold Cabinet Rank**—Mrs. Ralph Smith, who has just been appointed Minister of Education in the British Columbia Parliament



**Famous Artist's Queer Figures**—These quaint figures were carved in wood by Mr. H. M. Linding, a famous Swedish portrait painter who is now in New York, where his quaint work has attracted much attention



**Belgian Prince for the British Navy**—Prince Charles, the second son of the Belgian King, who has joined H.M.S. 'Temeraire' for a six months' cruise



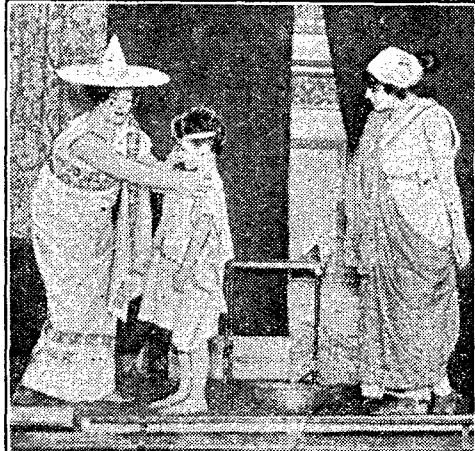
**Famous Picture for the Nation**—This famous picture by the Flemish artist Pieter Breughel is to be bought for the nation for £15,000. The public are asked for £3500 to complete the purchase



**Engine that Runs in the Street**—This locomotive with its tender, made by an American father for his boys out of old tins and other odds and ends, was recently seen in Cincinnati



**The Old Shepherd and His Young Charges**—All over the countryside now the young lambs are appearing in the fields, and no prettier sight is to be seen anywhere than the frisky little animals playing with their mothers, whom they follow about. In the South the lambs are, of course, earlier than in the North



**Women Acting in a Greek Play**—Scenes from the old Greek plays were recently performed in London with great success at Bedford College for women, and this picture shows one of the scenes



**The Elephants Have a Drink**—This is not a scene in tropical Africa but in New York, where the elephants belong to a menagerie and are taken down to a pond by their keeper for a refreshing drink



**Cabinet Minister Turns Artist**—Mr. Winston Churchill has become a successful artist, as described in the C.N. last week, and here we see him busy at his easel on the Riviera



**An Exciting Moment in the Hockey Match**—The Middlesex Ladies' Hockey Team recently defeated Surrey, and one of the most exciting moments in the game was this race down the field